Nevada Bureau of Air Pollution Control
Calendar Year 2006 Actual Production/Emission Reporting Form Addendum for Mercury Emissions

Source: Cumulative NMCP Data Submittals

	Pollutant ID	Production/Heat Rate	Production Units (eg. tons/yr)	Emissions Factor	Emissions Factor Units	HG Annual Emissions (lbs/yr)	Hours Operated	HG Co-Product (tons/yr)	Notes
Source: Newmont Mining Corporation - Twin Creeks Mine: AP1041-0723.01									
System Description: Juniper Mill Electric Induction Furnace (1 of 2 - only one operates at a time) - S2.001									
	Hg	41.90	tpy	0.0000853	lbs/hr	0.0358	420	0	
System Description: Juniper Mill Electric Induction Furnace (1 of 2 - only one operates at a time) - S2.001.1									
	Hg	43.80	tpy	0.00208	lbs/hr	0.9027	434	0	
System Description: Juniper Mill Carbon Kiln - S2.002									
	Hg	5,650.00	tpy	0.00313	lbs/hr	23.8850	7,631	0	
System Description: Mercury Retort Circuit (A) - S2.004									
	Hg	18.78	tpy	0.000133	lbs/hr	0.4680	3,519	2.31	
System Description: Mercury Retort Circuit (B) - S2.005									
	Hg	17.37	tpy	0.0000187	lbs/hr	0.0617	3,298	2.12	
System Description: Mercury Retort Circuit (C) - S2.005.1									
	Hg	18.61	tpy	0.0000271	lbs/hr	0.0885	3,264	2.23	
System Description: Mercury Retort Circuit (D) - S2.005.2									
	Hg	19.61	tpy	1.071E-06	lbs/hr	0.0038	3,519	2.25	
System Description: Pinon Carbon Kiln - S2.021									
	Hg	0.00	tpy	0.171	lbs/hr	0.0000	0	0	Unit did not operate in 2006.
System Description: Sage Mill Autoclave (Phase 1) - S2.023									
	Hg	1,673,331.00	tpy	0.018559	lbs/hr	153.4273	8,267	0	Emissions factor based on October, 2006 test data.
System Description: Sage Mill Autoclave (Phase 2) - S2.024									
	Hg	1,624,170.00	tpy	0.00795	lbs/hr	64.0770	8,060	0	
System Description: Electrowinning Cells (six cells ducted to common stack)									
	Hg	800,000.00	sol tons/yr	0.00486	lbs/hr	42.5736	8,760	0	
System Description: Juniper Mill Pregnant & Barren Tanks									
	Hg	800,000.00	sol tons/yr	0.0163	lbs/hr	142.7880	8,760	0	
System Description: Pinon Mill Pregnant Solution Tank									
	Hg	800,000.00	sol tons/yr	0.000133	lbs/hr	1.1651	8,760	0	
System Description: Pinon Mill Barren Solution Tank									
	Hg	800,000.00	sol tons/yr	0.000133	lbs/hr	1.1651	8,760	0	
System Description: Laboratory Sample Preparation Circuit (includes Drying Ovens) - S2.006 - S2.011									
	Hg	116.40	tpy		lbs/hr	3.7300		0	Assumes 100% volatization.

System Description: Laboratory Assay Furnaces - S2.012 - S2.016									
	Hg	6.90	tpy		lbs/hr	0.0000		0	Assumes 100% volatization.
System Description: Laboratory Leco Furnace									
	Hg	3.00	tpy		lbs/hr	0.0000		0	Assumes 100% volatization.
					Facility Total:	434.3715		8.9100	
Source: Queenstake Resources USA, Inc - Jerritt Canyon Mine: AP1041-0778									
System Description: System 40: West Roaster Process - S2.036 & PF1.213									
	Hg	459,549.00	tpy	0.0004	lbs/ton	183.8196	6,837	1.39	Estimate based on 2004 testing.
System Description: System 42: East Roaster Process - S2.041 & PF1.214									
	Hg	520,625.00	tpy	0.000114	lbs/ton	59.3513	6,551	1.57	Estimate based on 2004 testing.
System Description: Carbon Bed Venturi Scrubber (System 49: Carbon Kiln - S2.041 & System 51: Retort - S2.051)									
	Hg	47.00	tpy	0.02139	lbs/ton	1.0053	1,541	See Note	Estimate based on 2006 testing, Hg co-product accounted for under roasters.
System Description: System 35: Ore Dryer - S2.026									
	Hg	974,738.00	tpy	0.00001403	lbs/ton	13.6756	4,958	N/A	Based on March, 2007 testing, submitted to NDEP April, 2007.
System Description: Electrowinning Cells									
	Hg	N/A		0	lbs/hr	0.0000	N/A	N/A	Based on February, 2001 testing.
System Description: System 50: Refining Process (S2.050) Induction Furnace									
	Hg	10.51	tpy	130	ppm Hg	2.7000	831	See Note	Based on 2006 sample of induction feed. Hg co-product accounted for under roasters.
System Description: Laboratory: Large Ore Drying Ovens (5 Units)									
	Hg	1,094,530.00	lbs/yr	29.9	ppm Hg	32.7000	N/A	N/A	Assumes 100% volatization.
System Description: Other Lab Processes downstream of the Large Drying Ovens									
	Hg	58,667.00	lbs/yr	0	ppm Hg	0.0000	N/A	N/A	All Hg assumed to be volatized in the Large Drying Ovens.
System Description: Laboratory Small Ore Dryer (1 Unit)									
	Hg	6,652.00	lbs/yr	100	ppm Hg	0.6700	N/A	N/A	Assumes 100% volatization.
System Description: Other Lab Processes downstream of the Small Drying Oven									
	Hg	423.00	lbs/yr	0	ppm Hg	0.0000	N/A	N/A	All Hg assumed to be volatized in the Small Drying Oven.
System Description: Laboratory Hot Plates (2 Units)									
	Hg	977.80	lbs/yr	2.8	ppm Hg	0.0027	N/A	N/A	Concentrations per WPCP Quarterly testing, max value.
					Facility Total:	293.9245		2.9600	

Source: Newmont Mining Corporation - Gold Quarry: AP1041-0793									
System Description: ROTP Dry-Grinding Static Separator									
	Hg	3,156,763.00	tpy	1.8875E-07	lbs/ton	0.5958	7,519	0	
System Description: ROTP Ore Preheaters									
	Hg	3,073,402.00	tpy	0.006805	lbs/hr	51.9222	7,630	0	
System Description: ROTP Ore Roasters									
	Hg	3,073,402.00	tpy	0.000433	lbs/hr	3.3038	7,630	0.62	
System Description: ROTP North Calcine Quench									
	Hg	1,365,051.00	tpy	0.011412	lbs/hr	86.9823	7,622	0	
System Description: South Calcine Quench									
	Hg	1,708,351.00	tpy	0.007024	lbs/hr	53.5931	7,630	0	
System Description: AARL Carbon Kiln									
	Hg	6,121.50	tpy	0.011673	lbs/hr	71.5438	6,129	0.01	
System Description: AARL Carbon Kiln Combustion									
	Hg	33,693.90	MMBTU/yr	0.000216	lbs/hr	1.3239	6,129	0	
System Description: AARL Carbon Stripping (Pregnant) Tanks									
	Hg	14,800.30	tpy	0.000418	lbs/hr	2.7458	6,569	0	
System Description: Zadra Carbon Kiln									
	Hg	7,064.50	tpy	0.002487	lbs/hr	17.2672	6,943	0.04	
System Description: Zadra Carbon Kiln Combustion									
	Hg	39,396.00	MMBTU/yr	0.000047	lbs/hr	0.3263	6,943	0	
System Description: Refinery Retorts									
	Hg	80.10	tpy	0.002846	lbs/hr	9.1983	3,232	2.05	
System Description: Refinery Induction & Pour Furnaces									
	Hg	114.00	tpy	0.00922	lbs/hr	6.1811	670	0	
System Description: Refinery Barren Tank & Electrowinning (EW) Cells									
	Hg			0.00067	lbs/hr	5.3801	8,030	0	
System Description: Integrated Lab Fusing/Cupelling Furnaces #'s 1 - 7									
	Hg	4.80	tpy	N/A	N/A	0.1000	N/A	0	Emission rate is based on volume of samples processed, average mercury concentration and sample size assuming 100% volatization and release at the exhaust stacks.
System Description: Integrated Lab Grieve Drying Ovens									
	Hg	3,769.90	tpy	N/A	N/A	0.1000	N/A	0	Emission rate is based on volume of samples processed, average mercury concentration and sample size assuming 0.1% volatization at operating temperatures and release at the exhaust stacks.

System Description: Manual Lab Furnaces									
	Hg	5.88	tpy	N/A	N/A	0.1300	N/A	0	Emission rate is based on volume of samples processed, average mercury concentration and sample size assuming 100% volatization and release at the exhaust stacks.
					Facility Total:	310.6937		2.7200	
Source: Newmont Mining Corporation - Midas Operations: AP1041-0766.01									
System Description: Refinery Furnaces #1 & #2 - S2.035 & S2.036									
	Hg			0.018	lbs/hr	16.4700	915	0	Emissions factor from 2001 stack testing.
System Description: Retort A - S2.037									
	Hg			0.0000303	lbs/hr	0.0939	3,100	0	Emissions factor from 2003 stack testing. Throughput not reported, only heat rate. Calculations and test results on file.
System Description: Retort B - S2.038									
	Hg			0.000245	lbs/hr	0.6162	2,515	0	Emissions factor from 2003 stack testing. Throughput not reported, only heat rate. Calculations and test results on file.
					Facility Total:	17.1801		0.0000	
Source: Bald Mountain Mine Properties - Huntington Valley: AP1041-1362									
System Description: Carbon Reactivation Kiln									
	Hg	532.50	tpy	0.179	lbs/ton	95.3175	4,899	0	Default factor from permit limits. Alternative emissions rate based on 2005 testing = 34.29 lbs/yr (.007 lbs/hr * 4,899).
System Description: Electrowinning Cells									
	Hg	127,504.00	tpy				7,167	0	Emissions factor to be determined during 2007 testing.
System Description: Retort Furnace									
	Hg	13.82	tpy	0.02	lbs/ton	0.2764	1,637	2.94	Default factor from permit limits.
System Description: Bullion Furnace									
	Hg	10.87	tpy	10	lbs/ton	108.6900	453	0	Default factor from permit limits. Alternative emissions rate based on 2005 testing = 174.7 lbs/yr (.486 lbs/hr * 359.5).

System Description: Fire Assay Lab (4 Drying Ovens)									
	Hg							0	Assay Lab reported as one De Minimis Unit assuming 100% volatization of mercury based on the following formula: Samples/Yr * Weight (g)/1 * Avg. Hg Content (ppmw) * 1/(1.00E+06) = Hg Emitted/Yr. Actual values are: 141,154 samples * 30g * 2ppmw / 1.00E-06 = 8.47g/yr / 448 g/lb. = .0186 lbs/yr.
System Description: Fire Assay Lab (2 Fire Assay Furnaces)									
	Hg					0.0186		0	
System Description: Fire Assay Lab (6 Hot Plates)									
	Hg							0	
System Description: Fire Assay Lab (1 Atomic Adsorption Analytical Instrument)									
	Hg							0	
					Facility Total:	204.3025		2.9400	
Source: Kennecott Rawhide Mining Company - Denton-Rawhide Mine: AP1041-1116.02									
System Description: Carbon Regeneration Kiln									
	Hg	0.00	tpy	0.53534	lbs/ton	0.0000	0		Kiln inoperable during 2006.
System Description: Electrowinning Circuit									
	Hg	12,249.80	tpy	0.00779	lbs/ton	95.4259	1,632	0.0477	
System Description: System 1 - Mercury Retort									
	Hg	21.21	tpy	0.08	lbs/ton	1.6968	3,606		
System Description: System 2 - Refinery Furnace Baghouse									
	Hg	44.00	tpy	0.616	lbs/hr	254.4696	413	0.01442	
System Description: Fire Assay Lab Furnace Baghouse									
	Hg	0.05	tpy	0.01	lbs/ton	0.0005	416	<0.00001	
					Facility Total:	351.5928		0.0621	

Source: Hycroft Resources & Development, Inc. - Crofoot/Lewis Project: AP1041-0334.02									
System Description: Mercury Retort #1									
	Hg								System did not operate in 2006.
System Description: Mercury Retort #2									
	Hg								System did not operate in 2006.
System Description: Mercury Retort #3									
	Hg								System did not operate in 2006.
System Description: Furnace #1									
	Hg								System did not operate in 2006.
System Description: Furnace #2									
	Hg								System did not operate in 2006.
System Description: Furnace #3									
	Hg								System did not operate in 2006.
					Facility Total:	0.0000		0.0000	
Source: Metallic Ventures, Inc.: AP1041-1202									
System Description: Dore Furnace									
	Hg								System did not operate in 2006.
System Description: Carbon Reactivation Kiln									
	Hg								System did not operate in 2006.
					Facility Total:	0.0000		0.0000	
Source: Coeur D'Alene Mining Corporation - Coeur Rochester Mine: AP1044-0063.02									
System Description: Refinery Furnace									
	Hg	250.26	tpy	0.0059	lbs/hr	2.8792	488	0	
System Description: Retort									
	Hg	250.26	tpy	2.85E-10	lbs/hr	0.0000	6,376	16.1	
System Description: Assay Lab (Cumulative total for all units listed below)									
	Hg	8.30	tpy			0.0080	9,704	0	
System Description: Assay Lab - Grieve Sample Drying Oven (4 Units)									
	Hg	7.22	tpy			0.0000	1,726	0	
System Description: Assay Lab - Assay Furnaces (4 Units)									
	Hg	1.08	tpy			0.0000	484	0	
System Description: Assay Lab - Atomic Adsorption Analyzers (2 Units)									
	Hg	0.00				0.0000	3,288	0	
System Description: Assay Lab - LECO Furnace (1 Unit)									
	Hg	0.00				0.0000	520	0	

System Description: Assay Lab - Wet Lab Hot Plates (2 Units)									
	Hg	0.00				0.0000	3,650	0	
System Description: Assay Lab - Metallurgy Lab Hot Plate (1 Units)									
	Hg	0.00				0.0000	36	0	
					Facility Total:	2.8872		16.1000	
Source: Newmont Mining Corporation - Lone Tree Mine: AP1041-0059									
System Description: Autoclave, electrically fired									
	Hg	27,592.00	tpy	0.00539	lbs/hr	35.1590	6,523	0	Based on 2006 source test data.
System Description: Carbon Kiln, electric induction									
	Hg	611.00	tpy	0.205222	lbs/hr	572.1589	2,788	0	Based on 2006 source test data.
System Description: Electrowinning Cells									
	Hg	3.00	tpy	0.001442	lbs/hr	11.2822	7,824	0	Based on 2006 source test data.
System Description: Pregnant and Barren Solution Tanks									
	Hg	N/A	N/A	0.00012	lbs/hr	1.0512	8,760	0	
System Description: Drying Ovens									
	Hg	645.00	tpy			2.4500		0	Based on a mass balance multiplying pounds of sample processed and the average Hg concentration (1.94 ppm), assuming 100 volatization.
System Description: Lone Tree Mine Laboratory									
	Hg							0	
System Description: Lone Tree Mine Laboratory - Fire Assay Furnaces									
	Hg							0	
System Description: Lone Tree Mine Laboratory - Cress Furnaces									
	Hg							0	
					Facility Total:	622.1013		0.0000	
Source: Cortez Gold Mines - Pipeline Mining Operation: AP1041-0619.01									
System Description: Refinery Induction Furnaces #1 & 2									
	Hg	51.66	tpy	0.11	lbs/hr	56.4300	513	0	Tier 1 stack test conducted 03/06.
System Description: Electric Carbon Reactivation Kiln #1 (S2.006) & #2 (S2.007)									
	Hg	4,420.00	tpy	0.025	lbs/hr	92.4500	3,698	0.12	Tier 1 stack test conducted 03/06 with both kilns online.
System Description: Electrowinning Cells (Train #1 - 3 cells)									
	Hg	50.00	gal/min	0.00061	lbs/hr	5.3436	8,760	0	Tier 1 stack test conducted 04/06.
System Description: Electrowinning Cells (Train #2 - 3 cells)									
	Hg	50.00	gal/min	0.000154	lbs/hr	1.3490	8,760	0	Tier 1 stack test conducted 04/06.

System Description: Assay Laboratory Furnace Baghouse									
	Hg	0.01	tpy	0.000609	lbs/hr	4.8903	8,030	0	Tier 2.
System Description: Gold Sludge Drying Oven									
	Hg	51.66	tpy	0.002	lbs/hr	3.0000	1,500	0	Based on engineering calculations & other design criteria. Tier 2 stack test scheduled for June 2007.
System Description: Assay Laboratory, Leco Induction Furnaces									
	Hg	40,000.00	lbs/yr	1	ppm Hg	0.0000		0	
System Description: Assay Laboratory, Graphite Furnace									
	Hg	99.00	lbs/yr	0.3	ppm Hg	0.0000		0	
System Description: Assay Laboratory, Atomic Absorption Spectrometers									
	Hg	4,365.00	lbs/yr	0.3	ppm Hg	0.0013		0	
System Description: Assay Laboratory, Drying Oven (Walk through Grieve)									
	Hg	2,936,557.00	lbs/yr	1	ppm Hg	2.9366		0	
System Description: Assay Laboratory, Drying Oven (Small Grieve)									
	Hg	277,782.00	lbs/yr	1	ppm Hg	0.2778		0	
System Description: Assay Laboratory, Drying Oven (Back-up Small Grieve)									
	Hg	4,762.00	lbs/yr	1	ppm Hg	0.0048		0	
System Description: Assay Laboratory, Fusing/Cupelling Furnaces (DFC Electric)									
	Hg	12,699.00	lbs/yr	1	ppm Hg	0.0127		0	
System Description: Assay Laboratory, Annealing Furnace									
	Hg	159.00	lbs/yr	1	ppm Hg	0.0002		0	
System Description: Assay Laboratory, Hotplates									
	Hg	1,587.00	lbs/yr	1	ppm Hg	0.0016		0	
System Description: Assay Laboratory, Roasting Oven									
	Hg	5.00	lbs/yr	1	ppm Hg	0.0000		0	
System Description: Met Laboratory, Hot Plate									
	Hg	5.00	lbs/yr	1	ppm Hg	0.0000		0	
System Description: Met Laboratory, Benchtop Autoclaves									
	Hg	5.00	lbs/yr	1	ppm Hg	0.0000		0	
System Description: Met Laboratory Drying Oven									
	Hg	7,937.00	lbs/yr	1	ppm Hg	0.0079		0	
System Description: Strip Circuit Area, AA Machine									
	Hg	198.00	lbs/yr	0.3	ppm Hg	0.0001		0	
					Facility Total:	166.7059		0.1200	

Source: Florida Canyon Mining, Inc. - Florida Canyon Mine: AP1041-0106.02									
System Description: Mercurt Retorts									
	Hg	23,863.00	lb/yr	0.000042	lbs/lb	1.0022	1,030	0.000501123	Retort emissions factor calculated from 1993 stack test results; throughput for retorts and electrowinning circuits are the same.
System Description: Assay Lab									
	Hg	4,302.00	sample lbs/yr	0.000002	lbs/lb	0.0086		0.000004302	Emissions factor from De Minimis Determination Title V Inventory for Lab. Assay lab emissions calculated from Hg concentration in samples & annual throughput assuming all Hg in samples was emitted (volatized).
System Description: Summit Valley Electrowinning Cell Model #75EC18									
	Hg	23,863.00	lbs/yr	0.0011	lbs/lb	26.2493		0.01312465	Emissions factor from industrial source with similar equipment; throughput for retorts and electrowinning circuits are the same.
System Description: Combustion Air International Carbon Kiln Model #WCC250DX-2									
	Hg	2,238.00	tpy	0.162	lbs/ton	362.5560		0.181278	Emissions factor from industrial source with similar equipment.
System Description: Inductotherm Dore Furnace									
	Hg	22,632.00	lbs/yr	0.00225	lbs/lb	50.9220	272	0.025461	Emissions factor comes from Title V Inventory.
System Description: Pregnant Tank									
	Hg	23,863.00	lbs/yr	0.0011	lbs/hr			0.002996	Emissions factor from industrial source with similar equipment, however, hours not reported.
System Description: Barren Tank									
	Hg	23,863.00	lbs/yr	0.0011	lbs/hr			0.002996	Emissions factor from industrial source with similar equipment, however, hours not reported.
					Facility Total:	440.7382		0.2264	
Source: Round Mountain Gold Corporation - Smoky Valley Common Operation: AP1041-0444.01									
System Description: Carbon Regeneration Kiln: System 25 - S2.121									
	Hg	3,618.00	tpy	0.0091	lbs/ton	32.9238	8,675		Based on Hg mass balance.
System Description: Electric Induction Furnace: System 24 - S2.130									
	Hg	44.30	tpy	0.23	lbs/ton	10.1890	767	0.0085	Emissions estimate based on Hg mass balance.
System Description: Refinery Electrowinning Vent - NP1.005									
	Hg			0.00159	lbs/hr	13.9284	8,760		Based on limited vent sampling data.

System Description: Assay Lab (4 Drying Ovens)									
	Hg								Mass balance approach, emissions are for all twelve Assay Lab units.
System Description: Assay Lab (8 Assay Furnaces)									
	Hg	365,000.00	lbs/yr	3.8E-08	lbs/lb	0.0139	8,760		
System Description: High Grade Area (1 Drying Oven)									
	Hg	482.81	lbs/yr	0.000002	lbs/lb	0.0010	8,760		Mass balance approach, emissions are for all three High Grade Area units.
System Description: High Grade Area (2 Assay Fusion Furnaces)									
	Hg	63,875.00	lbs/yr	3.8E-08	lbs/lb	0.0024	8,760		
					Facility Total:	57.0585		0.0085	
Source: Homestake Mining Company - Ruby Hill Project: AP1041-0713.01									
System Description: Electric Carbon Kiln (S2.019)									
	Hg	11.80	tpy	0.03	lbs/hr	9.3900	313	0	See attached calculations.
System Description: Electric Mercury Retort (S2.022)									
	Hg	0.46	tpy	0.001	lbs/ton	0.0005	216	0.5	Default emissions factor from permit.
System Description: Electric Refinery Induction Furnace (S2.013)									
	Hg	0.07	tpy	5	lbs/ton	0.3600	6	0	Default emissions factor from permit.
System Description: Electrowinning Cells 1 & 2 (IA1.005)									
	Hg			0.0026	lbs/hr	19.0320	7,320	0	See attached calculations.
System Description: Assay Lab									
	Hg								System did not operate in 2006.
					Facility Total:	28.7825		0.5000	
Source: Glamis Marigold Mine - Marigold Mine: AP1041-0158.02									
System Description: Carbon Kiln (existing drum without controls from January 1, 2006 - October 17, 2006)									
	Hg	743.46	tpy	0.162	lbs/hr	893.6244	5,516	0	Emissions factor from January 17, 2006 source test.
System Description: Carbon Kiln (existing drum with controls from October 18, 2006 - December 31, 2006)									
	Hg	132.10	tpy	0.00016	lbs/hr	0.2011	1,257	0	Emissions factor from January 17, 2006 source test multiplied by 99.9% control efficiency.
System Description: Carbon Kiln (under construction)									
	Hg							0	System did not operate in 2006.
System Description: Electrowinning Circuit (3 cells without controls from January 1, 2006 - October 17, 2006)									
	Hg			0.0011	lbs/hr	7.2072	6,552	0	Emissions factor from January 18, 2006 source test.
System Description: Electrowinning Circuit (3 cells with controls from October 18, 2006 - December 31, 2006)									
	Hg	N/A	N/A	0.000001	lbs/hr	0.0022	2,208	0	Emissions factor from January 18, 2006 source test. multiplied by 99.9% control efficiency.

System Description: Retort (current configuration)									
		7.71	tpy	0.000834	lbs/hr	0.7564	907	0.1165	Emissions factor from December 19, 2005 source test.
	Hg							0.051	0.051 tpy misc. clean-up.
System Description: Retort (future configuration)									
	Hg								System not modified as of December 31, 2006.
System Description: Smelting Furnace (current configuration)									
	Hg	5.98	tpy	0.0089	lbs/hr	1.8939	213	0	Emissions factor from September 21, 2005 source test.
System Description: Smelting Furnace (future configuration)									
	Hg								System not modified as of December 31, 2006.
System Description: Pregnant Tank									
	Hg			0.0011	lbs/hr	2.1858	1,987	0	Common stack w/kiln - no data for barren tank alone.
System Description: Barren Tank									
	Hg			0.0011	lbs/hr	2.1858	1,987	0	Common stack w/kiln - no data for barren tank alone.
System Description: Assay Lab (2 Drying Ovens)									
	Hg					0.0022		0	Mass balance approach, 100% volatization assumed for total of 83,051 samples processed during 2006. The volatization rates used were: Drying Ovens - 5%, AA Instrument - 100%, Assay Furnaces - 99%, Cupellation Furnace - 33% of remaining 1% from assay furn., Hot Plates - 33% of remaining 1% from assay furnaces, Annealing Oven - 33% of remaining 1% from assay furnaces. See hard copy submittal for detailed discussion of emission calculations.
System Description: Assay Lab (1 Atomic Adsorption Analytical Instrument)									
	Hg					0.0005		0	
System Description: Assay Lab (2 Assay Furnaces)									
	Hg					0.0015		0	
System Description: Assay Lab (Cupellation Furnace)									
	Hg					0.0000		0	
System Description: Assay Lab (2 Hot Plates)									
	Hg					0.0000		0	
System Description: Assay Lab (1 Annealing Oven)									
	Hg					0.0000		0	
					Facility Total:	908.0610		0.1675	
Source: Borealis Mining Company: AP1041-2125									
System Description: No Submittal									
	Hg								Mine not yet operational, project on indefinite hold.
					Facility Total:	0.0000		0.0000	
Source: Placer Turquoise Ridge, Inc. - Getchell Mine: AP1041-0292.01									
System Description: Lab Fire Assay/Cuppellation Furnaces (4 Units - System 5: S2.008 & S2.009)									
	Hg			0.000229	lbs/hr	0.3506	1,531		Stack test results on file, test performed 09/12/06.
System Description: Leco Induction Furnaces (2 Units)									
	Hg	2,726.00	assays			0.0000			

System Description: Graphite Furnace (1 Unit)									
	Hg	6,830.00	analyses			0.0000			
System Description: Atomic Absorption Spectrometers (2 Units)									
	Hg	6,830.00	analyses			0.0000			
System Description: Drying Room (1 Unit)									
	Hg	16,293.00	samples			8.0461			
System Description: Drying Ovens (3 Units - Carl Mauer)									
	Hg	5,431.00	samples			2.2682			
System Description: Annealing Furnace (1 Unit)									
	Hg	37,884.00	samples			0.0009			
System Description: Hotplates (3 Units)									
	Hg	37,884.00	samples			0.0094			
System Description: Roasting Oven (1 Unit)									
	Hg	2,726.00	samples			0.0000			
System Description: Digestion Blocks (1 Unit)									
	Hg	0.00	samples			0.0000			
System Description: Benchtop Autoclave (1 Unit)									
	Hg	0.00	tests			0.0000			
System Description: Drying Ovens (1 Unit)									
	Hg	0.00	samples			0.0000			
					Facility Total:	10.6752		0.0000	
Source: Battle Mountain Gold Company - Reona & Phoenix Projects: AP1041-0220.02									
System Description: Electric Carbon Kiln (S2.002)									
	Hg	3,727.00	tpy	0.000366	lbs/hr	2.2736	6,212	0	
System Description: Electrowinning Cells									
	Hg			0.00000466	lbs/hr	0.0308	6,600	0	
System Description: Pregnant & Barren Solution Vent System									
	Hg			2.65E-07	lbs/hr	0.0017	6,600	0	
System Description: Retort (S2.014)									
	Hg	2.80	tpy	0		0.0000	112	0	
					Facility Total:	2.3061		0.0000	

Source: Golden Phoenix Minerals, Inc.: AP1041-0694.01									
System Description: Dore Furnace									
	Hg								Facility in temporary closure, system did not operatre in 2006.
System Description: WET Scrubber									
	Hg								Facility in temporary closure, system did not operatre in 2006.
System Description: Electrowinning Cell									
	Hg								Facility in temporary closure, system did not operatre in 2006.
System Description: Electrowinning Cell									
	Hg								Facility in temporary closure, system did not operatre in 2006.
System Description: Sludge Dryer									
	Hg								Facility in temporary closure, system did not operatre in 2006.
					Facility Total:	0.0000		0.0000	
Source: Barrick Goldstrick Mines, Inc.: AP1041-0739.01									
System Description: Roasters #1 & #2: System 18 - S2.209									
	Hg	5,858,384.00	tpy	0.00003996	lbs/ton	234.1010	8,573	98.55	Facility-wide Elemental and Calomel.
System Description: Carbon Kiln #2 Drum: System 61 - S2.004.1									
	Hg	10,153.00	tpy	0.024452	lbs/ton	248.2612	7,361	0	See Table C for emissions factor rationale.
System Description: Autoclave #1: System 66 - S2.015									
	Hg	833,725.00	tpy	0.0000128	lbs/ton	10.6717	8,149	0	See Table C for emissions factor rationale.
System Description: Autoclaves #2 & #3: System 66 - S2.016 & S2.017									
	Hg	2,189,423.00	tpy	0.0000128	lbs/ton	28.0246	16,267	0	See Table C for emissions factor rationale.
System Description: Autoclave #4: System 66 - S2.018									
	Hg	1,134,601.00	tpy	0.0000128	lbs/ton	14.5229	8,025	0	See Table C for emissions factor rationale.
System Description: Autoclaves #5 & #6: System 66 - S2.019 & S2.020									
	Hg	2,404,369.00	tpy	0.0000128	lbs/ton	30.7759	16,796	0	See Table C for emissions factor rationale.
System Description: Mercury Retorts #1 - #3: System 67 - S2.009 - S2.011									
	Hg			0.000423	lbs/hr	3.3713	7,970	0	See Table C for emissions factor rationale.
System Description: West & East Melting Furnaces & Electrowinning Cells Combined (vented through a common carbon filter): System 68 - S2.013 & S2.014									
	Hg	100.80	tpy	0.0916	lbs/ton	9.2333	1,019	0	See Table C for emissions factor rationale.
System Description: Electrowinning Cells only: System 68									
	Hg			0.00282	lbs/hr	20.8144	7,381	0	See Table C for emissions factor rationale.
System Description: Mill #1 Air Pre-Heater and Dry Grinding Process: System 15 - S2.204 & S2.205.01 - S2.205.12									
	Hg	2,732,156.00	tpy	TBD	TBD	TBD	7,969	0	Emissions to be determined based on source testing scheduled for July, 2007.
System Description: Mill #2 Air Pre-Heater and Dry Grinding Process: System 16 - S2.206 & S2.207.01 - S2.207.12									
	Hg	2,648,982.00	tpy	TBD	TBD	TBD	7,907	0	
System Description: Assay Laboratories Furnaces: System 70 - S2.051									
	Hg	45.35	tpy	0.36	lbs/ton	16.3260	8,760	0	See attached calculations for Assay Lab equipment.

System Description: Assay Laboratory: Leco Induction Furnaces									
	Hg	11.00	lbs/yr	25.79	ppm Hg	0.0003		0	See attached calculations for Assay Lab equipment.
System Description: Assay Laboratory: Graphite Furnace									
	Hg	6.60	lbs/yr	25.79	ppm Hg	0.0002		0	See attached calculations for Assay Lab equipment.
System Description: Assay Laboratory: Atomic Absorption Spectrometers									
	Hg	6,613.90	lbs.yr	25.79	ppm Hg	0.2000		0	See attached calculations for Assay Lab equipment.
System Description: Assay Laboratory: Mercury Analyzer									
	Hg	1.50	lbs/yr	25.79	ppm Hg	0.0000		0	See attached calculations for Assay Lab equipment.
System Description: Assay Laboratory: Hot Plates									
	Hg	1.30	lbs/yr	25.79	ppm Hg	0.0000		0	See attached calculations for Assay Lab equipment.
System Description: Assay Laboratory: Digestion Blocks									
	Hg	80.50	lbs/yr	25.79	ppm Hg	0.0020		0	See attached calculations for Assay Lab equipment.
System Description: Assay Laboratory: Digestion Blocks									
	Hg	5.50	lbs/yr	25.79	ppm Hg	0.0001		0	See attached calculations for Assay Lab equipment.
System Description: Assay Laboratory: Microwave									
	Hg	87.10	lbs/yr	25.79	ppm Hg	0.0020		0	See attached calculations for Assay Lab equipment.
System Description: Met Laboratory: Laboratory Tube (bench-top) Roasters									
	Hg	850.40	lbs/yr	25.79	ppm Hg	0.0200		0	See attached calculations for Assay Lab equipment.
System Description: Met Laboratory: Hot Plate									
	Hg	1.30	lbs/yr	25.79	ppm Hg	0.0000		0	See attached calculations for Assay Lab equipment.
System Description: Met Laboratory: Inductively Coupled Plasma (ICP)									
	Hg	160.90	lbs/yr	25.79	ppm Hg	0.0040		0	See attached calculations for Assay Lab equipment.
System Description: Met Laboratory: Bench Top Autoclaves									
	Hg	687.80	lbs/yr	25.79	ppm Hg	0.0200		0	See attached calculations for Assay Lab equipment.
System Description: Met Laboratory: Semi-Continuous Autoclave									
	Hg	4,960.40	lbs/yr	25.79	ppm Hg	0.1000		0	See attached calculations for Assay Lab equipment.
System Description: Assay & Met Laboratory: Drying Ovens									
	Hg	199.80	tpy	0.000119	lbs Hg/ton	0.0240		0	See attached calculations for Assay Lab equipment.
System Description: Mill Met Laboratory: Drying Oven									
	Hg	482.80	lbs/yr	25.79	ppm Hg	0.0100		0	See attached calculations for Assay Lab equipment.
System Description: Mill Met Laboratory: Lecos									
	Hg	17.70	lbs/yr	25.79	ppm Hg	0.0005		0	See attached calculations for Assay Lab equipment.
System Description: Strip Circuit Area: AA Machine									
	Hg	5,000.00	lbs/yr	25.79	ppm Hg	0.1300		0	See attached calculations for Assay Lab equipment.
System Description: Autoclave Met Laboratory: Lecos									
	Hg	17.70	lbs/yr	25.79	ppm Hg	0.0005		0	See attached calculations for Assay Lab equipment.

System Description: Autoclave Met Laboratory: Drying Oven									
	Hg	482.80	lbs/yr	25.79	ppm Hg	0.0100		0	See attached calculations for Assay Lab equipment.
System Description: Autoclave Met Laboratory: Hot Plate									
	Hg	357.30	lbs/yr	25.79	ppm Hg	0.0090		0	See attached calculations for Assay Lab equipment.
System Description: Roaster Pumphouse Laboratory: AA Machine									
	Hg	5,000.00	lbs/yr	25.79	ppm Hg	0.1300		0	See attached calculations for Assay Lab equipment.
					Facility Total:	616.7650		98.5500	
Source: The Plum Mining Company, LLC - Billy The Kid Mine: AP1041-0936									
System Description: No Submittal									
	Hg								
					Facility Total:	0.0000		0.0000	
Source: Royal Standard Minerals, Inc. - Manhattan Mine: AP1041-1457									
System Description: No Submittal									
	Hg								Mine not yet operational, project on indefinite hold.
					Facility Total:	0.0000		0.0000	

Cumualtive lbs/yr.		Cum. Co-Prod. tpy
4,468.15	Total	133.26